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J.O.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/155,796 11/30/98 YAMAGUCHI

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EXAMINER

002292 LM02/0927  
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ART UNIT

PAPER NUMBER

2711  
DATE MAILED:

09/27/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

JD

# Office Action Summary

Application No.  
09/155,796

Applicant(s)  
Yamaguchi

Examiner  
"Krista" Kleu-Oanh Bui

Group Art Unit  
2711



☐ Responsive to communication(s) filed on \_\_\_\_\_

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-20 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☒ Claim(s) 19 and 20 is/are allowed.

☒ Claim(s) 1-18 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been  
☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 8

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

2. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to suggest a video data distribution method as cited in claim 16 further comprising the steps of “wherein in the transmission level determining step, when the video data playback device plays back the video data with fast speed, the transmission level is determined in such a manner that the video data with a part of frame data thinned from plural frame data included in the video data is extracted, and when fast playback is not performed, the transmission level is determined in such a manner that the frame data of the video data is not thinned” and “wherein in the data extracting step, when the video data playback device quickly forwards and plays back the video data including plural frame data and voice data, said voice data is deleted from the video data and the number of frame data corresponding to the transmission level is extracted to generate video data, and in the transmitting step, the video data generated by said data extracting step is transmitted” as claimed.

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***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

4. Claims 1-2, 4-9 and 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katseff et al. (U.S. Patent No. 5,822,537) in view of Shimoda (U.S. Patent No. 5,440,345).

Regarding claims 1 and 11, Katseff et al (or "Katseff" hereinafter) teach a video data distribution device (Fig. 1) which comprises: a load measuring unit for measuring a load condition of a network or the video data distribution device, i.e., measuring load statuses by using a monitoring subroutine based on a predefined threshold value (Fig. 10 and col. 15/lines 15-24). Although Katseff includes the step of decompressing JPEG data to users (col. 9/lines 9-22), Katseff does not clearly mention to include "a data extractor for extracting the number of frame data corresponding to a measurement result of said load measuring unit from video data including plural frame data; and a transmitter for transmitting the frame data extracted by the data extractor"; however, such a technique of using a data extractor for extracting the number of frame data is known in the art. In fact, Shimoda does the same technique of using a data extractor for extracting data length information (Shimoda, Fig. 25b/item 217 and col. 27/lines 19-28) in

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Shimoda's high efficient encoding/decoding system in video recording or playback on TV broadcasting and on recording media. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Katseff's system with Shimoda's data extractor in order to extract the number of frame data corresponding to a measurement result of said load measuring unit from video data including plural frame data as desired. The motivation for doing this is to offer necessary means for extracting the number of frame data receiving from the previous step for video data processing purposes. In addition to claim 11, Shimoda does suggest to include "a video data playback device for receiving the frame data transmitted from the transmitter of said video data distribution device via said network and playing back the received frame data" (Shimoda, col. 13/lines 55-64).

As for claim 2, in view of claim 1 above, the step of "wherein based on the measurement result of the load measuring unit, the data extractor extracts all the frame data of the video data when the load is low, and extracts a part of the frame data of said video data when the load is high" is suggested by Katseff as Katseff discloses that when the load is extreme, the system will transmit only audio data, without any video data, to the user at the workstation (Katseff, col. 2/lines 56-64) which is clearly an indication that part of the frame data, i.e., using JPEG format with video frames (col. 9/lines 1-22) is transmitted only, not all of the frame data.

As for claim 4, in further view of claim 1 above, the step of "wherein the data extractor extracts the video data with inter-frame compressed frame data deleted therefrom from the video data having intra-frame compressed frame data and inter-frame compressed frame data based on

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the measurement result of the load measuring unit, and the transmitter transmits the video data extracted by the data extractor” is taught by Shimoda as Shimoda reveals that intra-frame compressed frame data and inter-frame compressed data differ each other in their encoded amount (Shimoda, col. 5/lines 20-24) and the inter-frame compressed frame data is the video data encoded using the intra-frame compressed frame I or the inter-frame compressed frame P (see Shimoda, Figs. 1, 4 & 7-8 and col. 1/lines 32-36), and Shimoda uses a Intra-frame/Inter-frame Identifier 63 with the help of motion detector 26 and Inter-frame predictor 68 (Shimoda, Fig. 17) to extract the inter-frame compressed data P out from the GOP layer comprising I and P frames as illustrated in Figure 7.

As for claim 5, Shimoda teach “wherein the video data is MPEG data” (Shimoda, Fig. 7 and col. 5/line 60-col. 6/line 45).

As for claim 6, similar to claim 4 above, the step of “wherein the data extractor generates the MPEG data with P picture deleted therefrom from MPEG data having I picture and P picture in accordance with the measurement result of the load measuring unit” is taught by Shimoda as Shimoda reveals that intra-frame compressed frame data and inter-frame compressed data differ each other in their encoded amount (col. 5/lines 20-24) and the inter-frame compressed frame data P is the video data encoded using the intra-frame compressed frame I or the inter-frame compressed frame P (Figs. 1, 4 & 7-8 and col. 1/lines 32-36), and Shimoda uses a Intra-frame/Inter-frame Identifier 63 with the help of motion detector 26 and Inter-frame predictor 68

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(Fig. 17) to extract the inter-frame compressed data P out from the GOP layer comprising I and P frames as illustrated in Figure 7.

As for claims 7 and 8, the steps of “wherein the data extractor generates MPEG data with B picture deleted therefrom from MPEG data having I picture and B picture in accordance with the measurement result of the load measuring unit” and “wherein the data extractor generates MPEG data with P picture and B picture deleted therefrom from MPEG data having I picture, P picture and B picture in accordance with the measurement result of the load measuring unit” are suggested by Shimoda as Shimoda reveals that only intra-frame compressed data I is left for extracting at the data extractor 217 (Shimoda, Fig. 25b and col. 27/lines 19-22) from the previous I & B or I & B & P picture of the GOP layer as illustrated in Figure 7.

Concerning claim 9, Shimoda further suggests to include “wherein the data extractor extracts plural I pictures from MPEG data having plural I pictures at intervals corresponding to the measurement result of the load measuring unit” as Shimoda includes an intra-frame data length 56 for reconstructing the data format of plurality of I pictures (intra-frame meaning for I pictures), for example, of a two-hour program with a signal rate of 200 Mbps (Shimoda, col. 12/lines 34-52 and col. 13/lines 55-64).

As for claim 12, Shimoda reveals “wherein the load measuring unit measures a load of a processor for controlling operation of the video data playback device” (Fig. 18/item 83 with adjustment bit and col. 12/lines 57-68).

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Regarding claim 13, the combination of Katseff and Shimoda does reveal that the system can be connected to a VCR and recording media (etc.) in the network (Katseff, Fig. 3/items 325 & 330 and Shimoda, col. 25/lines 25-30) which suggests more than one VCR can be utilized same as the step of “wherein plural video data playback devices are connected to the network” and the step of “one frame data transmitted from the transmitter of the video data distribution device onto said network is received by each of said plural video data playback devices” are suggested by Katseff as Katseff reveals that his system is a multimedia information retrieval system which connected to either a LAN or WAN (col. 3/lines 58-67) that allows to be accessed and shared by a plurality of users as well as with a plurality of file servers for distributing multimedia files (col. 4/line 65-col. 5/line 5).

As for claim 14, the step of “wherein the video data playback device transmits a data transfer request in which data amount is designated to the video data distribution device plural times, and upon receiving said data transfer request plural times, the video data distribution device transmits frame data based on the data amount designated by each data transfer request for said each data transfer request” is suggested by Shimoda as Shimoda discloses the technique of detecting the vector motion, monitoring the data amount, adjusting the rate and also adjusting the amount of output frame data using the motion detector, the variable length encoder, the rate controller as well as the data length counter in handling same task as claimed (Shimoda, col. 16/lines 21-62 and col. 12/lines 57-68).



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Concerning claim 15, Shimoda further suggests “wherein the video data playback device transmits a data transfer request in which video data is designated, and upon receiving said data transfer request, the video data distribution device transmits plural packets having a part of frame data of said video data at predetermined intervals” as Shimoda reveals in the trick play operation as the playback mode signal is instructed from the playback device to the video distribution device and the distribution device transmits a part of frame data of requested video data to the playback device (Shimoda, col. 27/lines 19-41).

Regarding claim 16, in view of claim 1 above, the combination of Katseff and Shimoda teaches a video data distribution method (Katseff, Figs 1 & 3) which comprises: transmission level determining step of determining a transmission level in accordance with a load of a video data distribution system (Katseff, Fig. 10 and col. 15/lines 1-65; and Shimoda, Fig. 8/items 55); a data extracting step of extracting the number of frame data corresponding to the transmission level determined by said transmission level determining step from video data including plural frame data (Shimoda, Fig. 25b/item 217 and col. 27/lines 19-28); and a transmitting step of transmitting the frame data extracted by said data extracting step (Shimoda, col. 30/lines 54-56).

As for claims 17 and 18, these claims are rejected in the scope of claims 12 and 16 for claim 17 and claim 11 for claim 18 as already discussed above.

5. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katseff (U.S. Patent No. 5,822,537) in view of Shimoda (U.S. Patent No. 5,440,345) and Takahashi (U.S. Patent No. 5,739,865).

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Regarding claim 3, Katseff and Shimoda do not disclose to include the thinning process for frame data such that “wherein the data extractor extracts the number of frame data by thinning frame data, based on the measurement result of the load measuring unit, among the plural frame data” as claimed; however, Takahashi does teach a same technique of thinning out frame data in Takahashi’s image processing system (Fig. 14 and col. 10/lines 30-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Katseff and Shimoda’s combination system with a known technique of thinning out frame data in video or image processing system in order to automatically adjust frame data corresponding to its load as measured in the previous process of the load measuring unit. The motivation for doing this is to manipulate frame data as much as possible.

As for claim 10, in further view of claim 3, the combination of Katseff and Shimoda reveals to further comprises an encoder (Shimoda, Fig. 2) for encoding image signals from a video camera in real time, i.e., capturing a meeting or presentations by using a camera in real time (Katseff, Fig. 3/item 330 and col. 6/lines 35-44) and generating video data having plural frame data (Shimoda, Figs. 4, 7, 15-16); and a buffer for temporarily storing the video data generated by the encoder (Shimoda, Fig. 5/item 32), wherein by thinning frame data among plural frame data in the video data stored in said buffer, the data extractor extracts the number of frame data based on the measurement result of the load measuring unit from said video data (see Examiner’s discussion in claim 3 above).

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***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Azadegan (US Patent No. 5,550,643) discloses trick play VCR for digitally coded video.

Jinzenji et al. (US Patent No. 6,032,189) disclose a network data distribution system.

Matsumoto (US Patent No. 5,729,651) disclose video signal with super impose character data reproducing apparatus.

Lee et al (US Patent No. 6,049,539) disclose access system and method for providing interactive access to an information source through a networked distribution system.

Hluchyj et al. (U.S. Patent No. 5,115,429) disclose a dynamic encoding rate control minimizes traffic congestion in a packet network.

7. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 308-6306 or (703) 308-6296, (for formal communications intended for entry)

**Or:**

(703) 308-5399, (for informal or draft communications, please label

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"PROPOSED" or "DRAFT").

*Hand-delivered responses should be brought to Crystal Park III, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).*

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Krista Kieu-Oanh Bui whose telephone number is (703) 305-0095. The examiner can normally be reached on Monday-Thursday (1st week of a bi-week) and Monday-Friday (2nd week of a bi-week) from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile, can be reached on (703) 305-4380.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

  
ANDREW I. FAILE  
SUPERVISORY PATENT EXAMINER  
GROUP 2700

Krista Bui  
Art Unit 2711  
September 13, 2000